- **2.6** As regard to the **Solar RPO** of **FY** 2020-21, GUVNL / DISCOMs have purchased 4455 MUs solar energy i.e. 4.84% against requirement of 6207 MUs to meet the stipulated solar RPO of 6.75%.
- 2.7 Thus, the net shortfall in compliance of total RPO compliance for FY 2020-21 is 2687 MUs i.e. 2.92%.
- **2.8** As regard to the shortfall in RPO Compliance during FY 2020-21, it is pertinent to submit the following before Hon'ble Commission:-

A. Constraints in availability of Renewable Energy / Inadequate capacity addition despite tie-up

a) At the outset, it is to submit that GUVNL has undertaken Competitive Bidding Process through numerous Tenders for procurement of wind and solar power, since 2017. A detailed statement enlisting the Tenders invited by GUVNL for procurement of wind and solar power is enclosed herewith as Annexure A.

It is to humbly submit that GUVNL has been making consistent efforts towards promotion of RE and for meeting the increasing RPO targets by tying up RE Capacity through Competitive Bidding. However, there have been instances of delay in concluding tender(s) on account of reasons beyond control of GUVNL viz. extension in bid-deadlines based on Bidders requests, requirement of modifying Bid Security / Performance Bank Guarantees in the interest of Bidders' participation, etc. Besides, at certain times, GUVNL had to undergo scrapping of tenders and re-tendering process on account of reasons viz. discovery of higher tariffs, low participation / bid-submission by single bidder, requirement of modifying tender conditions in the interest of Bidders' participation & competition, etc. Of late, GUVNL had to undertake re-tendering for 700 MW Solar capacity to be set up at Dholera Solar Park and 100 MW at Raghanesda Solar Park. It is to submit that the aforesaid tendering process for procurement of 700 MW power has been challenged before APTEL and is stalled in wake of pendency of legal proceedings.

It is imperative to mention that a couple of Bidding Processes initiated by GUVNL have been deferred a number of times due to various reasons beyond control and factors not attributable to GUVNL. Had the same been concluded on time, GUVNL could have attained the benefit of additional generation from such procurement processes and helped mitigate RPO Compliance.

- b) It is to further highlight that MNRE vide its Office Memorandum had decided that a blanket extension of 5 months' time may be granted to all the RE Projects under implementation, on account of Force Majeure due to disruption in supply-chains and nationwide lockdown because of outbreak of Covid-19 pandemic. In light of the same, GUVNL had granted a time-extension of 5 month's period to several RE Projects under implementation viz. 15 no. of Solar Power Projects aggregating to 1900 MW capacity, 2 no. of Wind Projects aggregating to 140 MW capacity and 5 no. of MSW based Projects aggregating to 67.2 MW Projects. Resultantly, substantial capacity aggregating to 2107.2 MW (1912.4 MW with SCoDs falling in FY 2020-21 and 194.8 MW in FY 2021-22) has been deferred. It is to highlight that the above mentioned Projects of 1912.4 MW capacity scheduled to get commissioned during FY 2020-21 could have entailed generation benefit of approx. 1586 MUs (considering their contracted CUF% or normative CUF% as the case may be), which GUVNL was deprived of, in wake of the time-extension relief granted to abovementioned Projects on account of Force Majeure event of unforeseen outbreak of Covid-19 pandemic.
- c) Moreover, it is to further submit that inspite of tying up capacity with certain RE Projects as mentioned herein below, GUVNL could not avail the anticipated generation on account of factors solely attributable to such RE Generators.
 - → GUVNL had signed PPAs with the Bagasse based Co-Generation Projects (viz. 60.2 MW Project with Nitash Co-Generation Pvt Ltd and 16.8 MW Project with Vasu Bioenergy Pvt) which were not set up by the Project Developers, which otherwise could have contributed to an additional generation of 472 MUs (@

normative CUF of 70%) and helped in RPO Compliance of GUVNL / DISCOMs.

- → The SCoD of M/s Cargo Power & Infrastructure Pvt Ltd's 25 MW Solar Thermal Project has been extended by Hon'ble Commission time and again. Timely execution of the Project could have entailed generation benefit of 42 MUs (@ normative CUF of 19%) and helped in RPO Compliance of GUVNL / DISCOMs.
- → Some of the PPAs executed by GUVNL for Waste to Energy (Municipal Solid Waste based) Projects have not been developed by the Project Developers and hence terminated by GUVNL on account of default on their part. Execution of 11.5 MW Project of RGE Surat Pvt Ltd could have entailed generation benefit of 86 MUs (@ contracted PLF of 85%) and 4 MW Project of Junagadh WTE Pvt Ltd could have benefitted generation of 28 MUs (@ normative PLF of 80%). Thus, these Projects could have attained generation of 114 MUs and helped in RPO Compliance of GUVNL / DISCOMs.
- → GUVNL was constrained to terminate a 30 MW Wind Project executed through Competitive Bidding (Phase-I) on account of default on part of the Wind Developer viz. M/s Evergreen Mahuva Windfarms Pvt Ltd, which could have otherwise added generation of 65 MUs (@ normative CUF of 24.5%).
- → There were also instances of delayed commissioning (even after giving 5 months' extension on account of Force Majeure of COVID-19). Had the same been commissioned as per their revised SCODs i.e. not been delayed by the Generators, GUVNL could have availed generation benefit from the same. It is to submit that GUVNL could have at least availed generation benefit aggregating to 63.4 MUs (considering normative generation @ 65% PLF from the 14.9 capacity of M/s Goodwatts WTE Ahmedabad Pvt Ltd & 7.5 MW capacity of M/s Goodwatts WTE Jamnagar Pvt Ltd were delayed beyond their Revised SCoDs of 31.08.2020 & 30.11.2020 respectively) and



- **8.6** MUs from M/s Avaada Sunrise Energy Pvt Ltd (225 MW capacity was delayed beyond their Revised SCOD of 21.03.2021). Thus, GUVNL was deprived of aggregate generation of **72** MUs which could have otherwise contributed in the RPO Compliance of GUVNL / DISCOMs.
- → To sum up, it is to humbly submit that GUVNL has remained deprived from the generation benefit equivalent to 764 MUs from the abovementioned Projects solely on account of reasons attributable to the RE Generators. The above generation could have otherwise helped mitigate RPO Compliance of GUVNL / DISCOMs.
- d) Thus from the above, it can be perceived that there was non-availability of about 2350 MUs on account of inadequate capacity addition / supply constraints in availability of RE sources, on account of reasons beyond control of GUVNL.

B. Actual RE generation below normative generation

- a) It is to submit that the 3 Biomass Based Projects (aggregating to 30 MW capacity) have completely stopped generating power since Aug-2020, in wake of dispute / litigation with regard to non-operation of Projects as per Grid Code. It is to further submit that generation from these Projects during FY 2020-21 was hardly 52.7 MUs i.e. PLF of 20.07 % against the normative PLF of 80% which could have entailed generation of 210.24 MUs (shortfall of approx. 158 MUs).
- b) It is to further submit that the overall wind generation during FY 2020-21 was significantly low, impacting the overall / yearly RPO Compliance. It is to point out that, the average CUF% attained during FY 2020-21 by the Wind Projects was 17.77%.

Particulars	GUVNL PPAs	Wheeling Agreements / Others	Total
Capacity (MW) (as on 31.03.2021)	4221	2204	6425
Generation (MUs) (FY 2020-21)	6809	3192	10001
CUF%	18.41%	16.53%	17.77%

(Source: SLDC's SEAs & Wind Energy Certificates)



It is to highlight that there is substantially big difference between the actual CUF% and normative CUF% of 24.5% (as recognized by Hon'ble Commission in their Tariff Order), which has led to an overall wind deficit of **more than 2000 MUs** during the year FY 2020-21.

c) From the above, it is clearly evident that there was substantial shortfall on account of under-operationalization of RE Projects.

C. Efforts made by GUVNL towards RPO Compliance

- a) GUVNL has been proactively promoting RE Sources since inception of the first Solar Power Policy notified by Govt. of Gujarat in 2009 when the concept of solar energy and solar technology was at nascent stage of development in India as a whole and was not considered to be a proven technology for power generation in comparison to other RE sources like Wind, Small Hydel, Biomass, etc. Since then, GUVNL has been making all-out efforts towards using non-conventional energy sources for surmounting the issues of carbon emissions and its related impacts on climatic change.
- b) Pursuant to the GoG Solar Power Policy 2009, GUVNL had tied up 886 MW capacity (out of which 861 MW capacity has been available to GUVNL since FY 2011-12 to meet the Solar RPO, while commissioning schedule of 25 MW capacity of M/s Cargo has been extended by Commission / delayed inordinately).
- c) Taking into consideration the increasing trend of Solar RPO during ensuing years, GUVNL tied up 250 MW capacity in 2017 under SECI's Competitive Bidding under Phase -II, Batch- IV of Jawaharlal Nehru National Solar Mission (JNNSM) of Government of India.
- d) Thereafter, since FY 2017-18, GUVNL has been persistently undertaking tendering processes and aggressively tying up RE Power to meet the increasing RPO targets. GUVNL tied up 4550 MW RE power - comprising of 700 MW Wind power and 3850 MW Solar



Power (2850 Non-Park based & 1000 MW Park based) through Competitive Bidding.

- e) Further, DISCOMs have recently tied-up about 949 MW capacity under the GoG's Policy for development of Small Scale Distributed Solar Projects, generation benefit of which would be available in / after FY 2022-23.
- f) Moreover, GUVNL envisages procurement of solar power from GSECL under GoG's policy for allocation of revenue wasteland on token rate in the vicinity of existing GETCO sub-stations.
- g) Furthermore, GUVNL envisages buying power from some of the Hybrid Projects to be developed at the Khavda RE Park.
- h) The present RE Capacity tied up by GUVNL is as under:-

Source	Capacity (MW) tied up as on 31.10.2021
Wind [#] (incl. REC PPAs)	4318
Solar*	4987
Biomass	30
Small Hydel	21
Municipal Solid Waste	67
Total	9423

^{*}Excludes capacity of 30 MW of a terminated Wind PPA

- i) From the above, it is evident that GUVNL / DISCOMs have added substantial RE Capacity. Hon'ble Commission is therefore humbly requested to recognize that GUVNL / DISCOMs have been making all possible efforts exercising commercial prudence towards promotion of renewable energy and compliance of RPO Obligation of GUVNL / DISCOMs.
- 2.9 As enumerated hereinabove, it is to humbly submit that the cumulative effect of the following factors have severely affected the RPO Compliance of GUVNL / DISCOMs.

^{*}Another approx. 949 MW Solar capacity recently tied up by DISCOMs under GoG's Policy for Small Scale Distributed Solar Projects.